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ABSTRACT

Census data from 1901-1971 on the status of Welsh in Wales are used to illustrate the problems of making language planning recommendations on the basis of limited and scale-specific analyses. Using maps and charts, the data are analysed at national, regional, local, and individual levels. Different patterns of language maintenance and usage emerge at each level for the same area. It is concluded that the various scales should be seen as complementary rather than alternative interpretations. The more ways of assessing the position of minority languages that are employed, the more realistic the approach to their conservation and development is likely to be. (EKN)

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SCALE AS AN INFLUENCE ON THE GEOLINGUISTIC ANALYSIS OF A MINORITY LANGUAGE

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Introduction:

Minority language groups in twentieth century Europe have attracted the interest of students from a widening range of disciplines, each with something to contribute, by way of approaches and techniques, to the understanding of the increasingly-urgent problems facing many linguistic minorities. These problems may be associated with the decrease in numbers of speakers, or with a reduction of quality and status in the languages themselves, with changing economic circumstances affecting individuals and communities, or with the political implications of language change. The research of geographers working in this field has been concentrated on the task of identifying and describing patterns of language change and the processes which underpin such change. Progress to date has recognized the complexity of the phenomenon under consideration and has produced a promising, if limited, series of individual case studies. In general, though, most studies have been undertaken at one scale of analysis and have often recommended specific policy proposals based upon limited and scale-specific analyses of the situation.

This paper aims to supplement the information provided by previous studies undertaken primarily in Wales by concentrating on the scale problem in geolinguistic analysis. After an introduction at the scale of the language area as a whole, the discussion will

focus on progressively smaller localities within Wales, and elsewhere, examining the effect which each increase in scale may have upon the understanding of the predicament of minority languages. Our purpose is not only to examine the Welsh language in particular, but also to assess the part which geographical methods may play in the study of language decline more generally.

THE WELSH CASE STUDY

The national scale:

In the crudest numeric terms, one can summarize the decline of Welsh from a peak of 977,400 speakers in 1911 to 542,425 in 1971 and from 280,900 monoglot speakers in 1901 to 32,725 in 1971. The decline has, of course, been much more than numeric. If the information were available it would almost certainly show, in addition, a decline in the frequency of use by speakers and, in many cases also, a reduced fluency and confidence in the use of Welsh as an everyday medium of conversation. By comparison with other European minorities, we are relatively fortunate in being able to document the decline in spoken Welsh in precise numeric terms; our apparently precise figures were obtained from the Census Report on the Welsh Language in Wales for 1971, and with the exception of 1941, a decennial count has been made of Welsh speakers since 1891. For earlier dates it is possible to substitute the information from sources such as the Anglican Church Visitation Returns, Welsh-medium newspaper circulations, diaries and travellers' notebooks, so as to produce a map of territorial recession of the language at the national scale (Figure 1). Many of the features on this map will reappear later in our discussion, but note the considerable area of the west, by 1971 almost divided into

The territorial retreat of Welsh since 1750

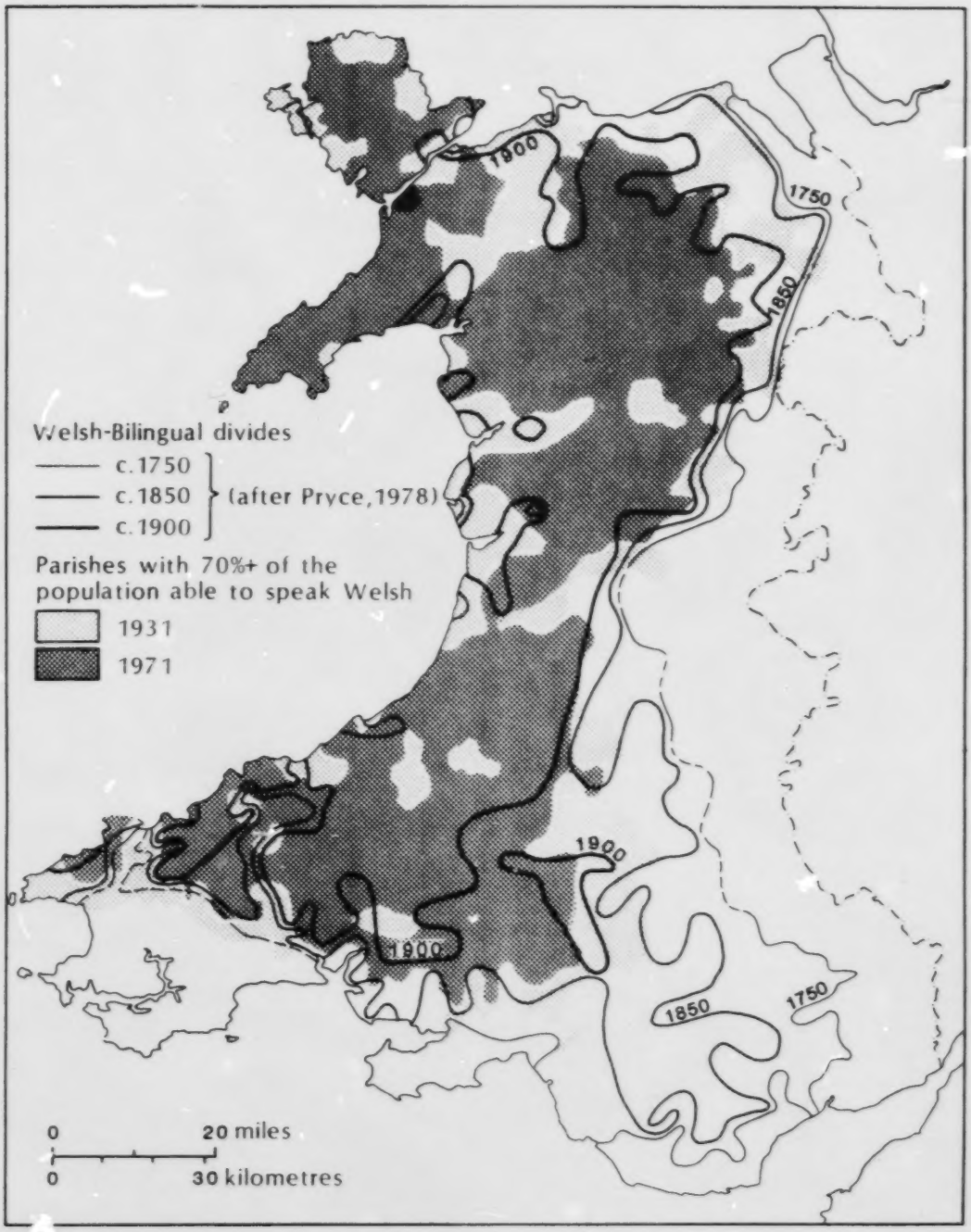


Figure 1

two by the Severn valley, where over 70 per cent of the population were able to speak the language. The indentations around the edge of this 'core' area (e.g. the Cardiganshire Bay coast, the North Wales coast, the Conway valley) offer some clue to the fact that the area has not yet ceased to shrink. Long-standing, strongly Anglicized areas may be identified in southern Pembrokeshire, the whole of the South Wales coalfield and along much of the national border. Yet even in the latter region the Welsh core area at one point closely approaches the English border and even extended across it into England itself until recent decades, according to the data here used. This is the border area upon which our later discussion will focus.

An alternative method of summarizing language change is presented in Figure 2. Each county graph reveals the proportions of monoglot Welsh and bilingual Welsh-English speakers by counties and over time, 1901-71. In some counties there was a considerable monoglot reservoir until the 1920's and 1930's (cf. table) indicating the operation of two distinct processes of language change, the one being the sequential abandonment of Welsh, the other the acquisition and spread of English producing a predominantly bilingual population in traditional Welsh-speaking communities. However, ther is a notable disparity between the patterns for the various counties, some of which have maintained an overall high proportion of people able to speak Welsh but have without exception suffered a continuous decline in the monoglot element, and in others of which it is the total Welsh-speaking population which is suffering the relentless decline, while the monoglot reservoir is practically non-existent.

Figure 2 clearly expresses the several different states of survival of Welsh in the major regions of the Principality, inviting

Change in Welsh speaking, 1901-71 (former counties)

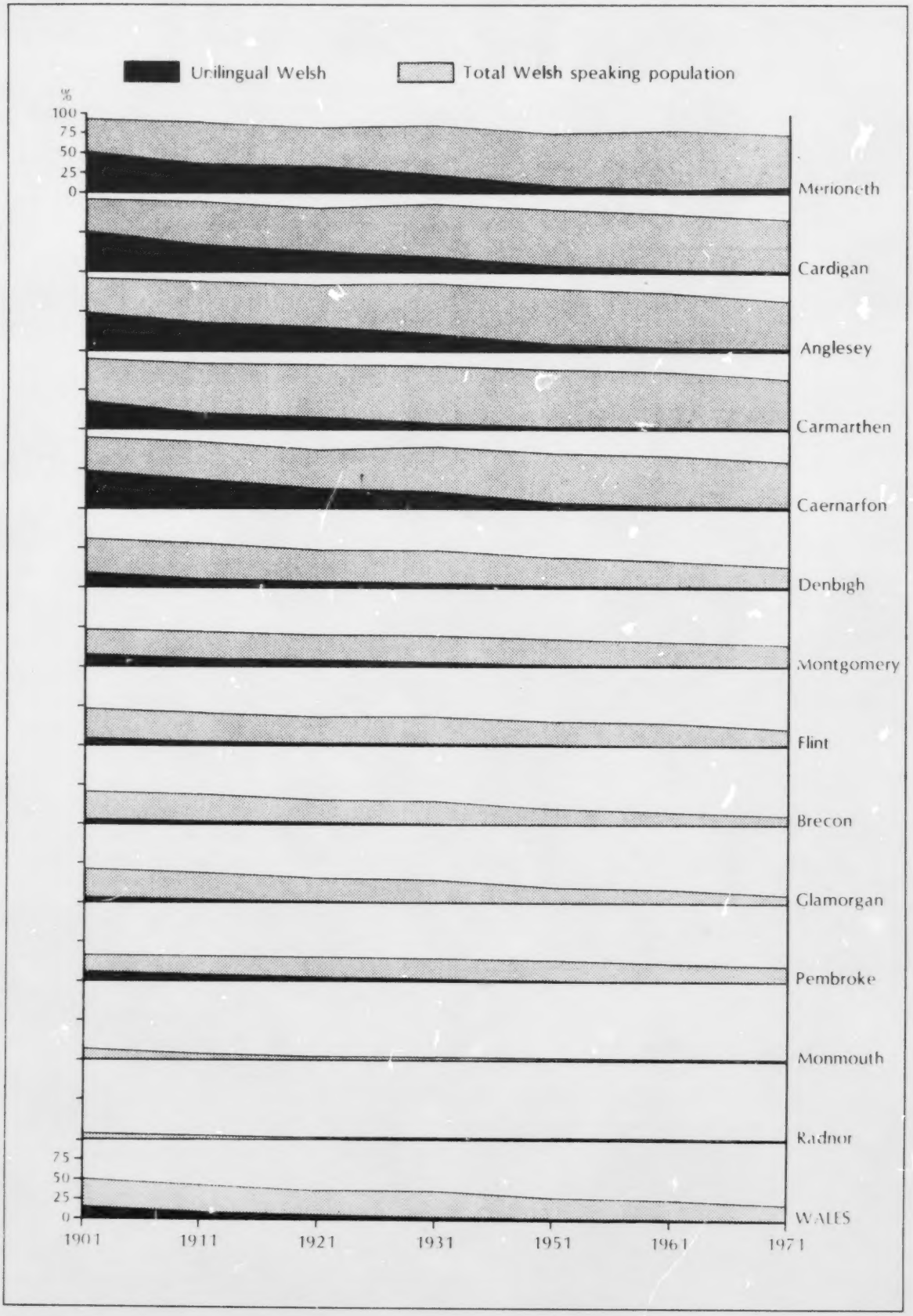


Figure 2

inspection of the pattern in more detail. Few geolinguists would be content to abandon the inspection at this level of generalization, and Welsh geographers have been fortunate, since the early decades of this century, to have been able to make use of the parish and ward unit as a basis for census information presentation on Welsh speaking. Plotted in Figure 3, they give a much more satisfactory impression of the language's distribution at the national scale. Upon the availability of such data has been built a considerable literature discussing the fortunes and future of Welsh at a national and regional scale.

The features mentioned in association with Figure 1 may now be seen to greater advantage. At this level of information it could be said that the map ceases to be simply a means of data presentation and starts to become a tool for analysis. This may be seen especially clearly if we add a time element to the parish map and, instead of merely portraying the percentage of parish populations able to speak Welsh, show the extent of the decline (or, more rarely, the increase) in the proportion of parish populations who can speak Welsh between one census and the next (Figure 4). Rates of change vary over the national territory, and for geolinguists the fact that there are coherent and recognizable patterns justifies the time - consuming task of plotting parish and ward information. Amongst the most interesting features to emerge has been a zone, generally surrounding the 'core area' of the language as previously defined, where the rate of decline has been more rapid than average (i.e. over 5 per cent between the 1961 and 1971 censuses). The decline is frequently much more; in seven cases it was more than 20 per cent over the ten year period. This 'zone of collapse', as it might be termed, has been given some particular attention, and surveys of

attitudes to the Welsh language have indicated that in this zone there is a degree of ambivalence concerning the importance of the survival of the language. At the national scale the zone of collapse could be said to be a zone of uncertainty, controversy and lack of unanimity concerning the language's future role, and this is quite likely to exacerbate the rate of collapse.

The regional level:

The first stage in the descent from the national scale examines a section of the zone of collapse at a regional scale, taking some hundred parishes in the Borderland country of Clwyd and Powys (until 1974 Denbigh, Flint and Montgomery), and plotting their Welsh monoglot and bilingual populations as a proportion of their total populations. On the resultant graphs it is possible to recognize a commonly-occurring pattern of Welsh decline, with a series of distinct phases, and to indicate for the majority of parishes, at which phase in the decline they stood in 1971. The phases are outlined on Figure 5 and plotted cartographically on Figure 6. Levels of Welsh speaking ability may stay near a hundred per cent over a long and uninterrupted period (though, as in the county graphs the monoglot level is continuously decreasing during this phase). Next, over a period of a few decades in this border region, a rapid change of fortune seems to overtake the language. There is a sudden crisis involving the whole numeric basis of Welsh speaking within some parishes, while others nearby remain apparently unaffected, even though experiencing strongly similar economic, demographic and other circumstances. As Figure 6 shows, the distribution of parishes in each phase is not a random one, but a series of narrow zones corresponding with the different phases, may be seen. Such a

The national pattern of Welsh speaking in 1971, as derived from parish and ward figures

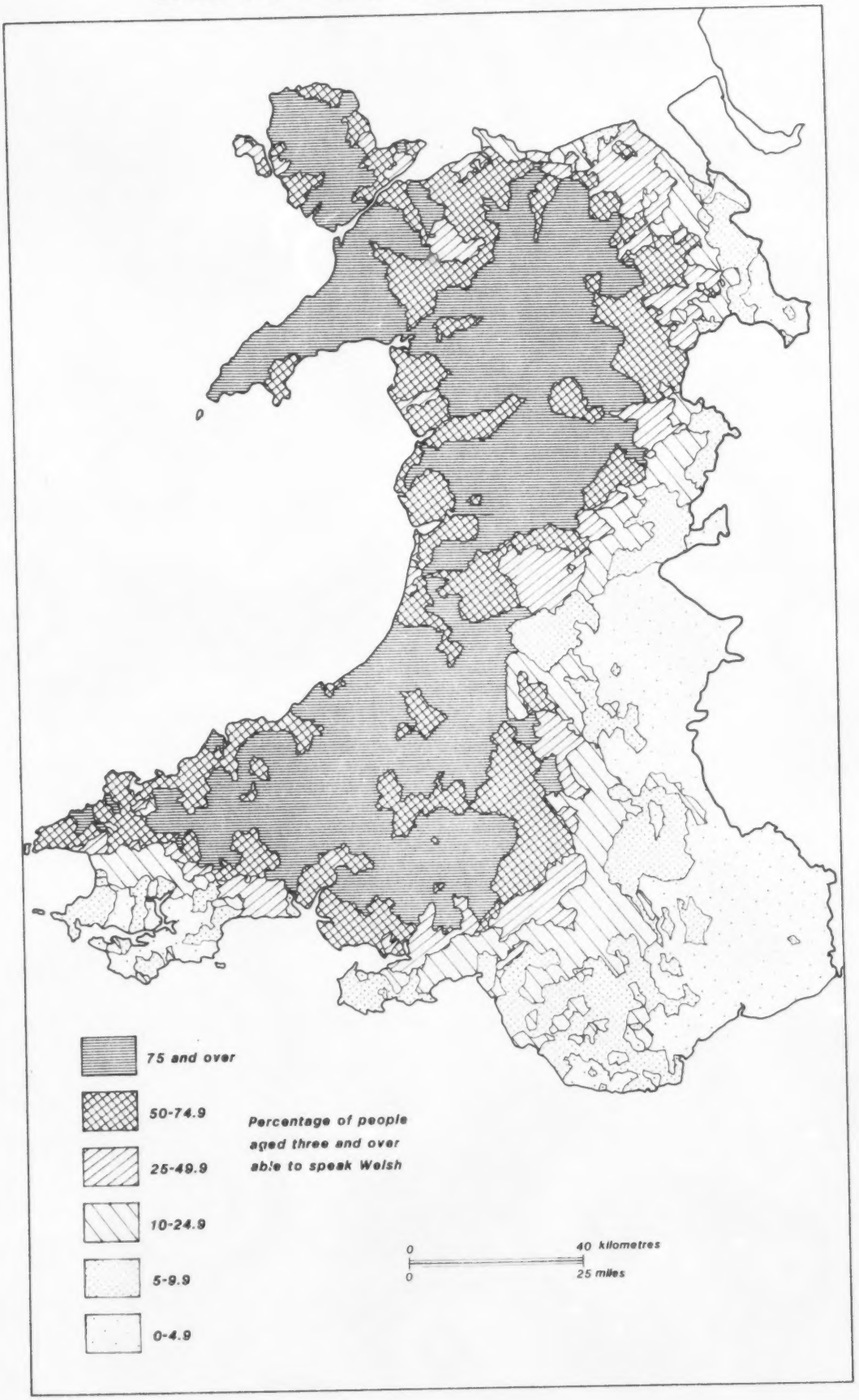


Figure 3

Change in Welsh-speaking population, 1961-71 (by wards and parishes)

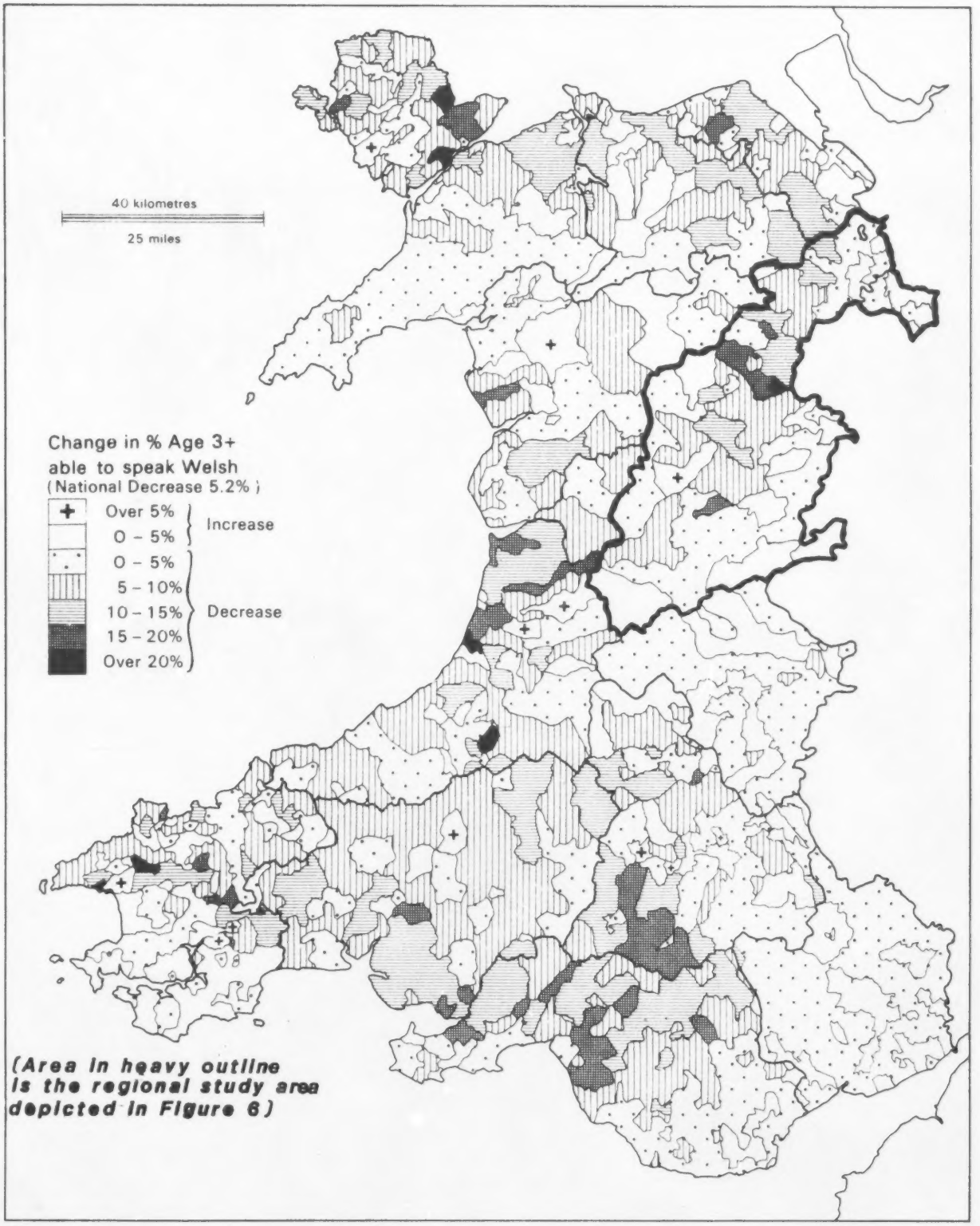


Figure 4

Phases of Welsh decline, based on a sample of census data, 1921-71

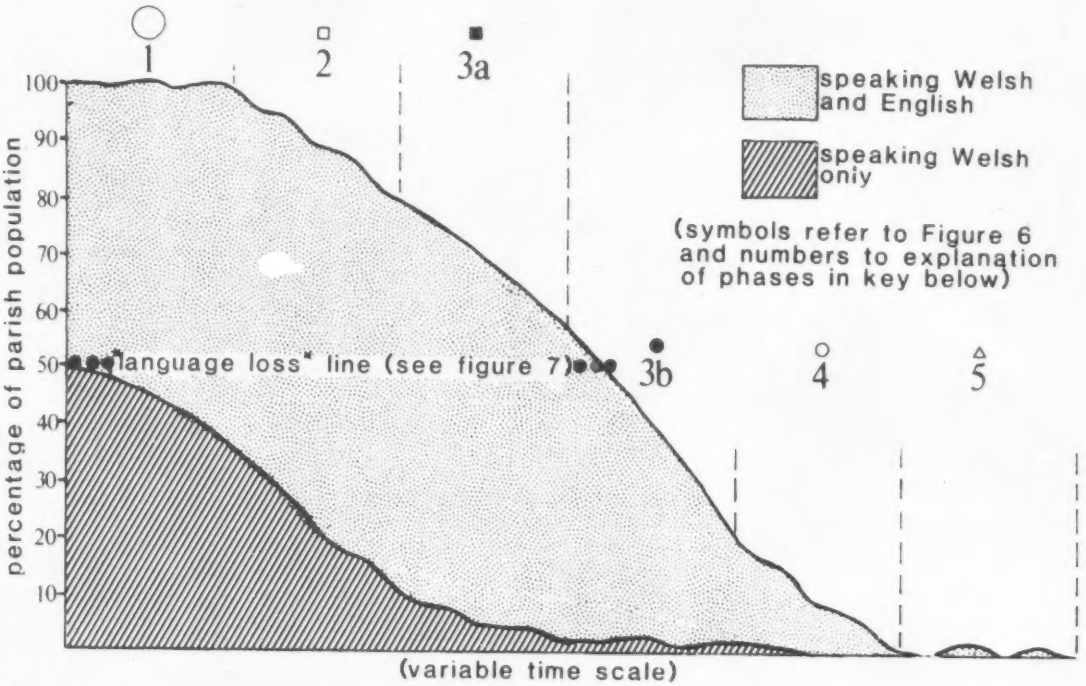


Figure 5

Key to numbered phases on the diagram:

1. With occasional exceptions, the whole parish population is able to speak Welsh. The monoglot reservoir may be high, sometimes approaching half the population, but is declining rapidly.

2. The Welsh-speaking percentage fluctuates between 80 and 100 per cent. The monoglot reservoir has declined to 20 per cent or less.

3. The Welsh-speaking percentage is clearly in sharp decline, but more than half the parish population is still able to speak Welsh. The monoglot reservoir fluctuates between 1 and 10 per cent, or may be extinct.

4. The percentage of Welsh-speaking fluctuates between 1 and 20 per cent. The monoglot reservoir is usually less than 5 per cent, or is completely gone.

5. Welsh speaking is sporadic or extinct and the monglot reservoir non-existent.

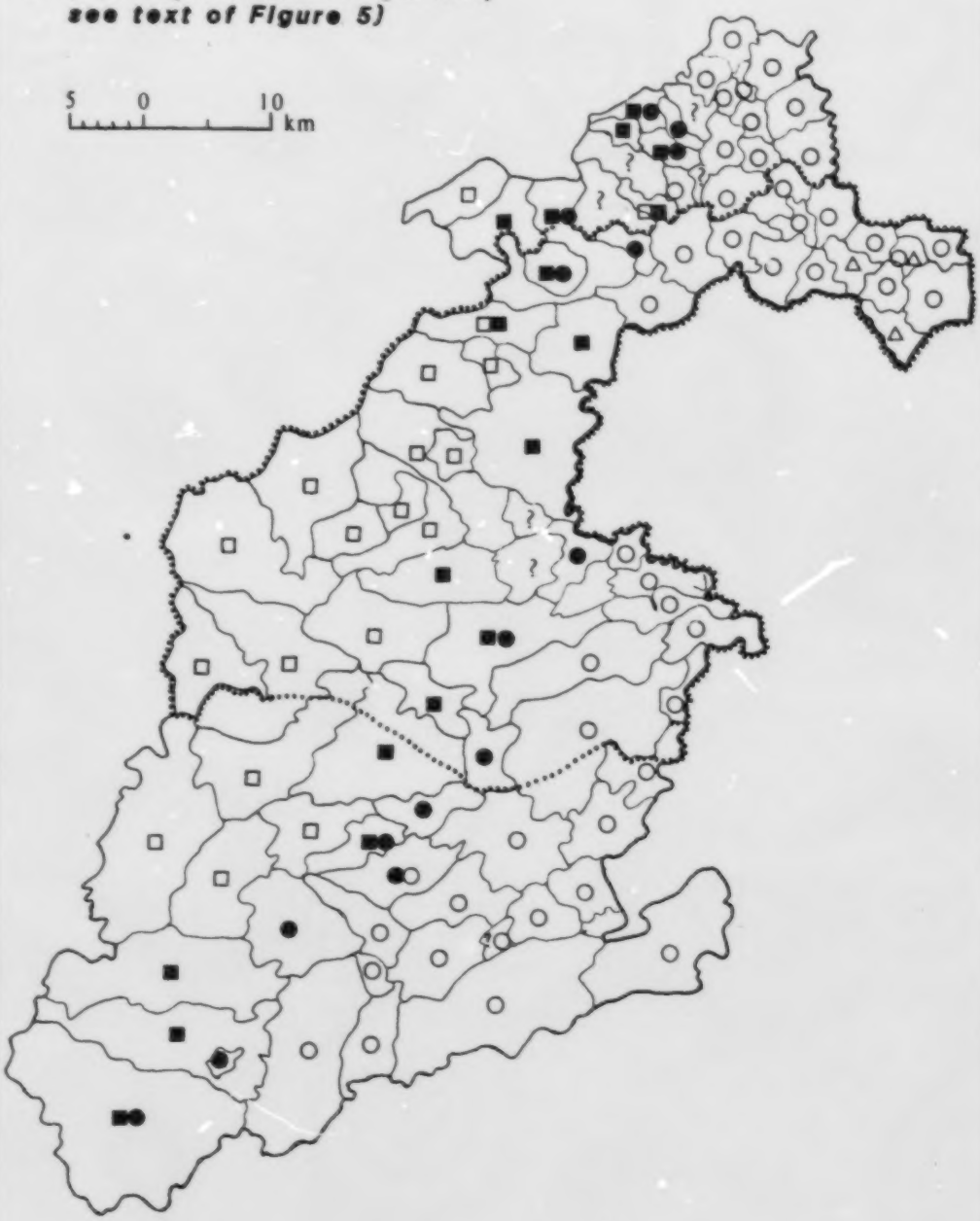
?. The parish in question does not fall clearly into any of the above categories.

In some cases, parishes are in transition from one of these categories to another during the fifty year period (1921-1971) for which data were examined, and more than one of the symbols on the diagram appears on the map (Figure 6).

Source of data: Census reports on Welsh speaking, 1921 - 1971.

The pattern of Welsh decline at the regional scale, as interpreted from census data, 1921-71

(For explanation of symbols, see text of Figure 5)



Location of regional study area is shown on Figures 4 and 7

Area in dotted outline is that represented in Figure 8

Figure 6

pattern presents a problem, both for those seeking a coherent language planning policy for the region, and for the speakers themselves. The different circumstances occurring from one zone to another seem to demand distinctly different amounts of support for the language, whether this support be measured in terms of manpower or of financial expenditure. Further, when information from the 1981 Census is added to the graphs, it is likely to confirm what the examination of past figures has already indicated : that the successive zones are moving inward towards the core area of Welsh. Planning policies, as well as being variable from one part of the region to another, must be adaptable at short notice in order to accommodate the suddenly-changing fortunes of the language in any locality.

As for individual bilingual Welsh speakers within the region, their predicament while the process of collapse is taking place may easily be imagined. All the usually clearly-defined norms concerning the most appropriate choice of language for any given domain or relationship may be liable to sudden change over a short time and from one village to the next. In connection with the zone of collapse at the national scale it has already been stated that an ambivalent feeling amongst those living in the zone towards the survival of Welsh is probably instrumental in hastening the language's disappearance. Now, at the regional level, it begins to become clear, as depicted on Figure 6, that most speakers, in pursuit of their daily or weekly duties, must pass into areas where numeric conditions may be distinctly different from those immediately surrounding their home, and where quite different rules of usage may apply.

Figure 7 places the regional study area, for a moment, back into the context of the Welsh language area as a whole, and maps a feature which is closely associated with the phase of collapse : the passage of Welsh speaking ability below fifty per cent of total parish populations. This may truly be said to mark the transition from a majority to a minority language locally. This point in the numeric change is taken to constitute the 'loss' of Welsh in the community in question, and further reference to the graph of change on Figure 5 shows that this is not too strong a term. The fifty per cent point corresponds with the central phase of collapse, and probably with the point at which confusion and demoralization are at their peak. At this point many would-be speakers are likely to give up the language as a lost cause. The plotting of locations of parishes thus lost since 1951, along with those most likely to have suffered the same fate between 1971 and 1981 (Figure 7), shows one more aspect of the progress of the zone of collapse towards the centre of the language area.

The limitations of census data at the sub-parish scale:

The figures from eight census reports on Welsh speaking have been the means of identifying those parts of the Welsh language area where the greatest numeric changes have taken place. The next step should be the detailed examination of the processes contributing to change, and for this purpose census data in their present form prove to be disappointingly ineffective. There are two main reasons for this. The first concerns the lack of data on the practice of Welsh speaking (as exemplified by its frequency of use by individuals, when compared with English, or by the variety of circumstances in which it is used) as opposed to the mere ability to speak the language. Apart from the

ability to read and write in Welsh, included for the first time in the census report on Welsh speaking in 1971 and discussed by Bowen and Carter (1975), no such data on Welsh use in practice are available from census sources. The numeric collapse in speaking ability recorded on earlier diagrams is almost certainly the final phase of a gradual weakening of the language's position, earlier stages of which may include a reduced frequency of use and a reduced fluency and confidence in the use of Welsh as an everyday medium of conversation. It could be proposed that the official statistics available represent only the 'fait accompli' of change at the national and regional scale, without allowing the detailed examination of processes which might help to counteract such change, and that by the time numeric patterns reveal that the collapse has reached any particular area, effective counter-measures are already more difficult that they would have been had the problems been recognized in their incipient stages.

The second major deficiency in census data is particularly significant in the discussion of scale, since it is nearly impossible to obtain information on Welsh speaking in any more detail than that provided at the parish and ward level, because of confidentiality regulations at the Office of Population Censuses and Surveys. Nearly impossible, because just one line of investigation remains : use of figures from a special tabulation at the scale of Enumeration Districts (E.D.s) the units used in the collection of census figures. The area marked on Figure 7, including a section of the zone of collapse, was chosen for a trial mapping of E.D. information, which appears on Figure 8. The upper map (8a), using the more usual parish unit, is provided for comparison.

The "loss" of Welsh-speaking areas between 1879 and 1981

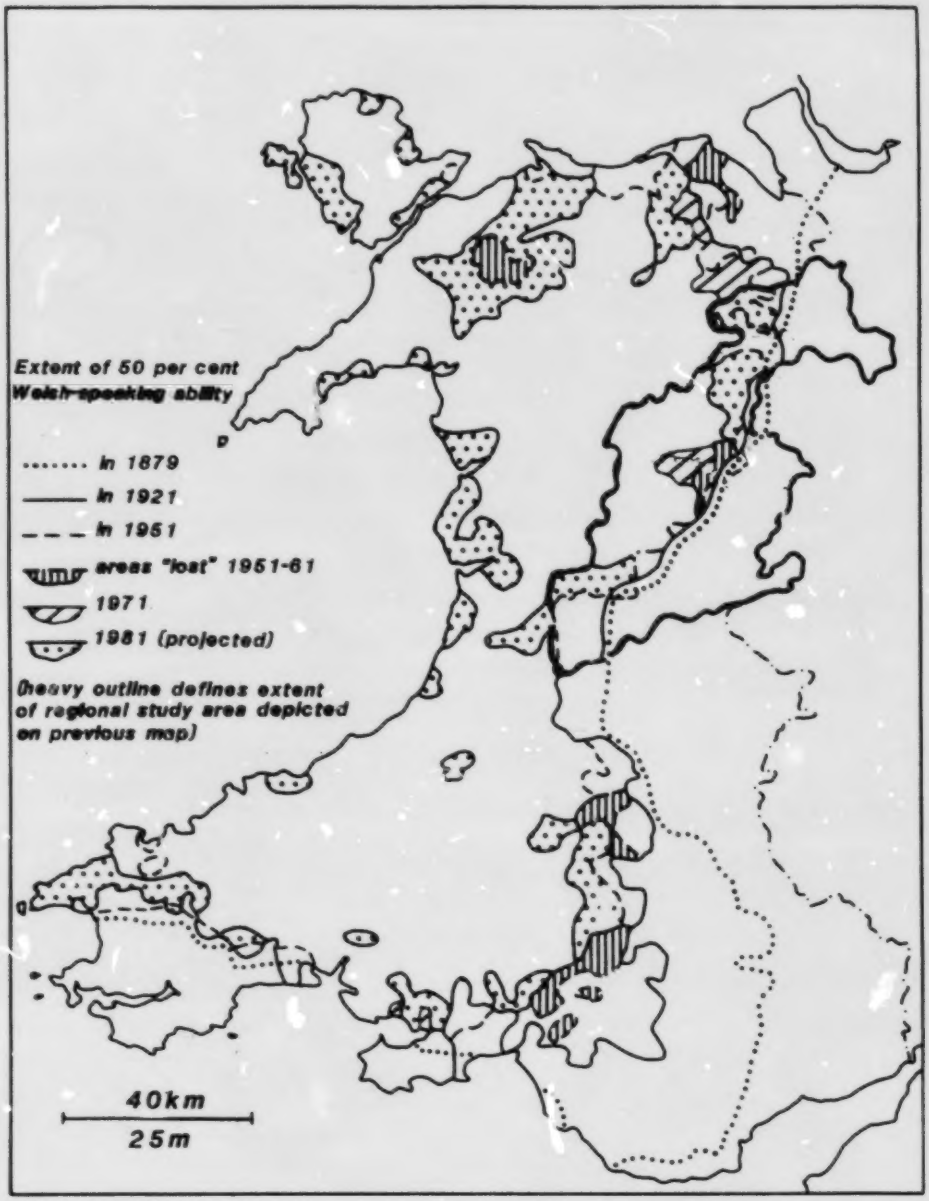


Figure 7

A casual inspection of Figure 8 might lead to the conclusion that a significant increase in detail has been achieved at E.D. level, but this is for the most part an illusion. There is certainly a proliferation of symbols on the lower map, particularly in urban areas such as Cefn (the area on the inset) : but in respect of the linguistic processes at work, particularly those in the zone of collapse, the exercise is disappointing. No additional conclusions can be reached.

Numeric language ability at the local scale:

It is at this point that most geographers part company with the pursuit of detail, making a leap of scale - and also, frequently, of cultural context - to sociolinguistic studies of the individual speaker, for example the much quoted work by Fishman (1965). It is frequently difficult to reconcile information from such differing disciplinary backgrounds, and at such different scales, and it was decided in this instance to attempt to produce maps of the distribution of Welsh at an intermediate scale, for the area shown in dotted outline on the upper part of Figure 8, and to portray not only the numeric ability to speak Welsh, but also two aspects of its use in practice : the frequency and versatility of its use by speakers.

Only when the results of the first part of this exercise are presented (Figure 9) can the degree of generalization in the language census be appreciated. The map gives an impression of the complexity of the zone of collapse as it must exist in other parts of Wales. While there is an overall transition from west to east across the area, the most remarkable feature is the great degree of fragmentation of the surface. If Figure 6 and 7 gave the impression that the zone of collapse was a clearly-

Census data: increase in detail provided by decreased mesh size

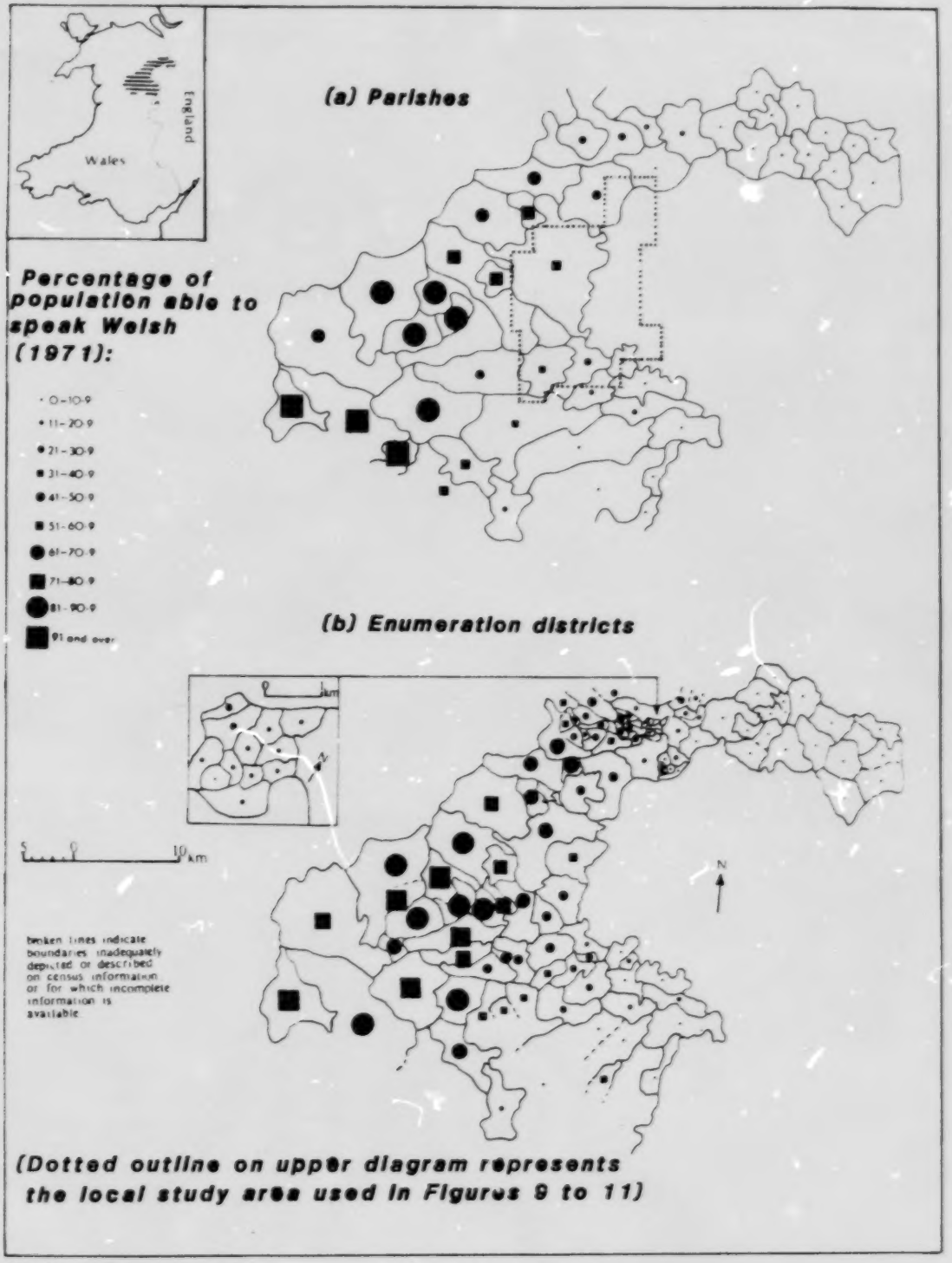
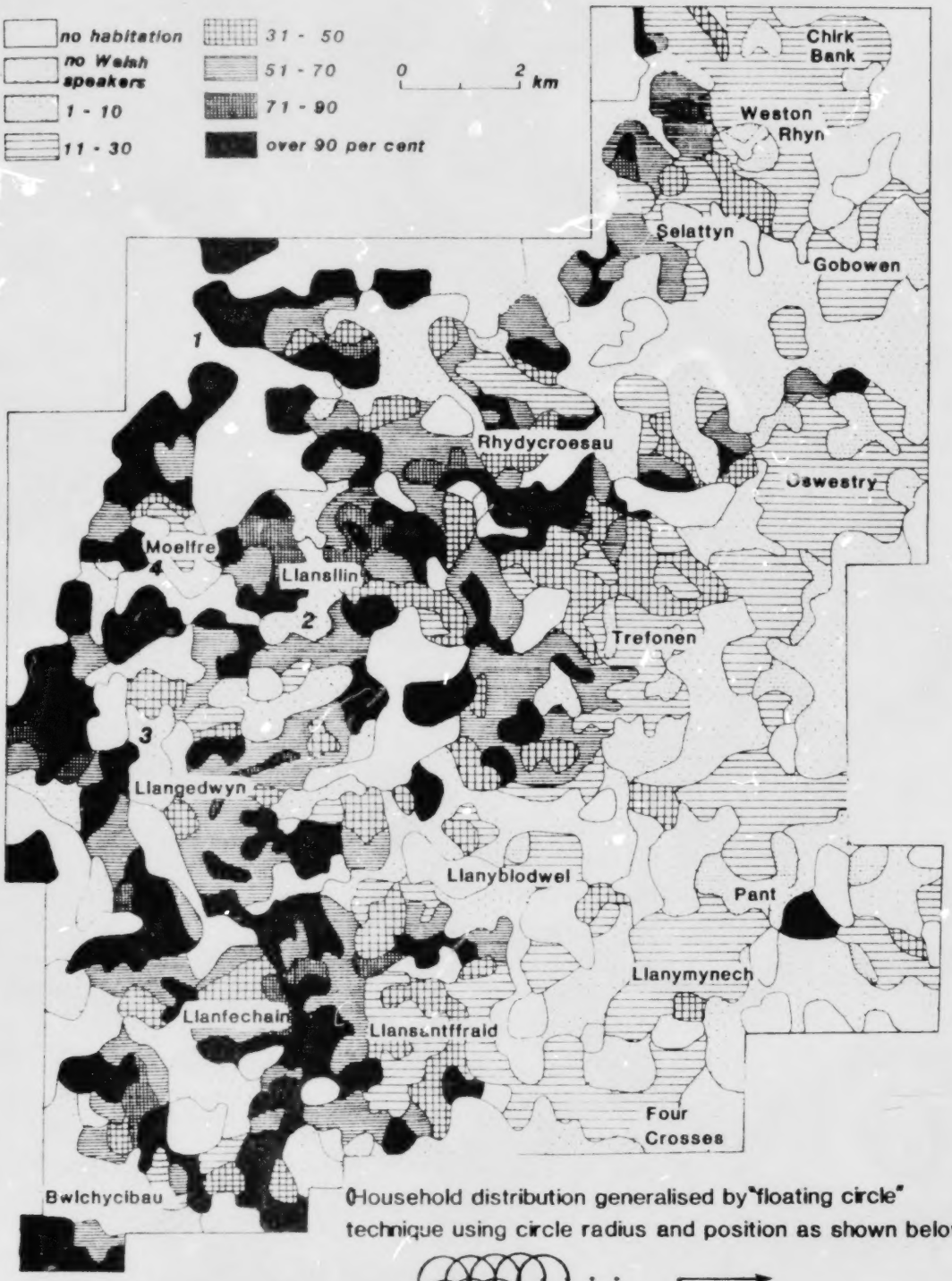


Figure 8

defined entity, in territorial terms this enlargement tells a quite different tale, and one which has rather different implications for the language planning process. Some of the many influences at work in the changing situation of Welsh may be deduced from the map. In some places in the west (for example, at the point marked 1) may be seen remnants of the almost continuously Welsh surface, which, census data indicate, would have existed there even two decades ago. Now there are almost completely English pockets too. They correspond in some places with routeways (2 on the map), in others with hilltop small - holdings (3) and, in still others, with villages (4). The effect of these Anglicized pockets, interrupting, as they do, the more or less continuous Welsh speaking surface, must be to reduce the confidence with which local people initiate Welsh conversation. and to interpose obstacles between groups of potential users of the language. Elsewhere on the map, as in the area stretching north-south between the villages of Gobowen and Four Crosses in the east, and in the market town of Oswestry, in-migration of Welsh speaking people produces a somewhat higher proportional Welsh ability than might be expected, and it is worth noting that since population densities are considerably higher in the east of the area than in the west, absolute numbers of speakers of the language are often as high as, or higher than, in other parts of the map (often over ten, and occasionally over fifty, per square kilometre).

The drawing of maps such as Figure 9 is one step; their analysis is quite another. A geographer's first reaction may well be to employ concepts of space, distance and density to seek answers to a number of questions. Is it the proportional or absolute number of speakers which is more important? Is there a threshold number of speakers necessary to form a viable local speech group? Or does the continuance of the

Percentage of households with one or more members able to speak Welsh, 1972



(Household distribution generalised by "floating circle" technique using circle radius and position as shown below)

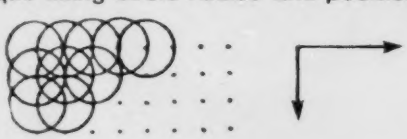


Figure 9

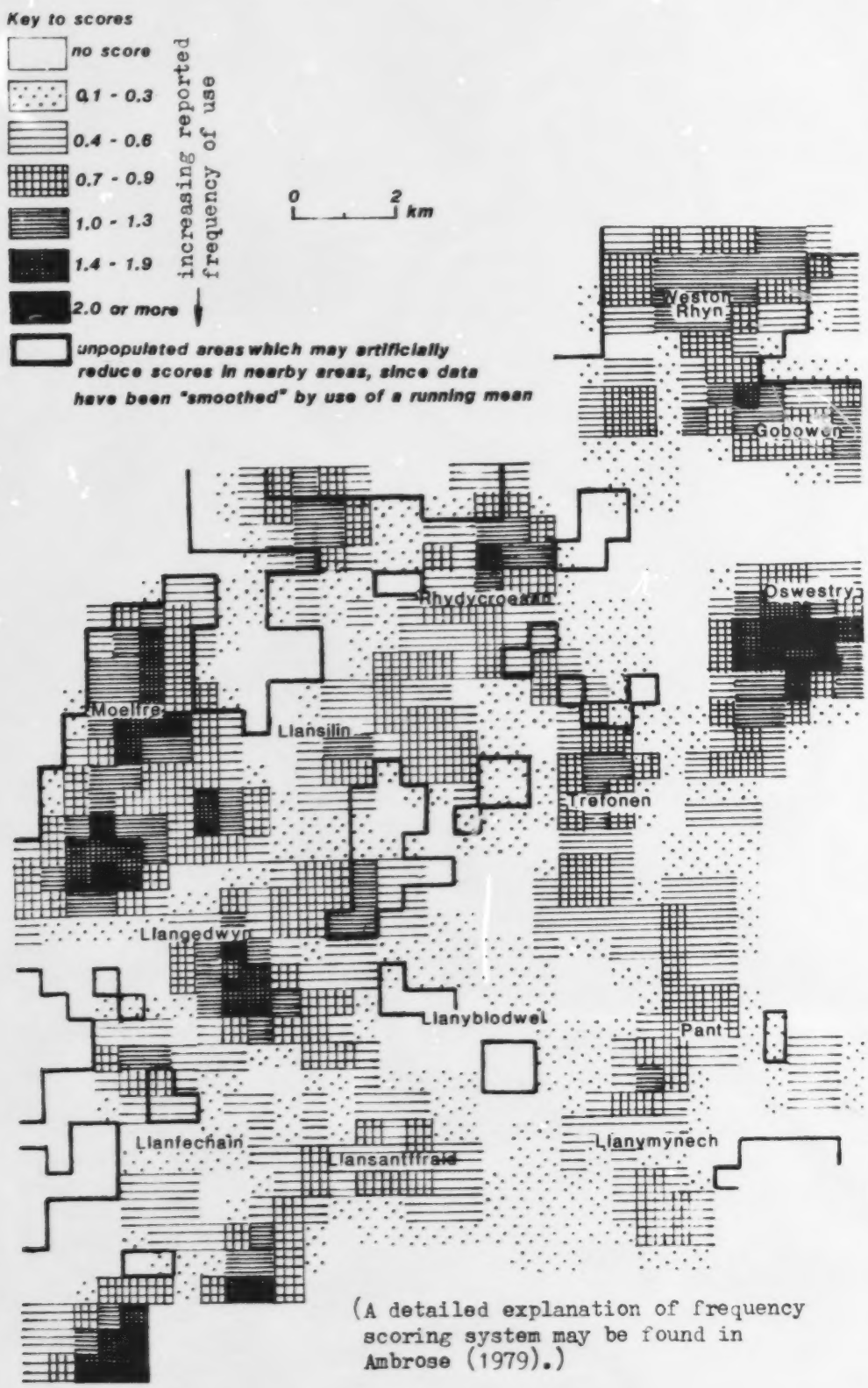
language relate perhaps to some crucial distance or density of speakers? There is, of course, no simple answer; were there one, the task of language planning would be considerably easier than it is. Many considerations, such as those of lifestyle, ages, attitudes and perceptions of speakers, prevent generalization. If it was imagined that the process of gradual enlargement of scale would solve those mysteries which existed at earlier levels of generalization, that hope must be laid aside; it becomes clear that, far from being the final stage of geographical analysis, the large-scale map on Figure 9 is the beginning of a whole new phase of investigation, posing as many questions as it answers - questions which the existing data sources leave totally un-asked.

Local patterns of language in practice:

The difficulties in using numeric data on language ability, however detailed they may be, as a surrogate measure of language 'strength' or 'vitality', are reinforced when detailed patterns of Welsh use in practice are examined. If Figure 9 is compared with one showing the reported frequency with which speakers say they are able to use Welsh in their locality (Figure 10), this point is underlined. The darker the shading on Figure 10, the greater is the reported frequency of Welsh use in the area concerned.

As may be seen, there is a far from total correspondence between areas where Welsh speakers form a high proportion of the population and those where the language appears to be used most frequently, though there are some places where the two coincide. At many points in the east where, according to the earlier map, fewer than thirty per cent - sometimes even fewer than ten per cent - of households have a Welsh speaker,

Average frequency scores for Welsh speaking

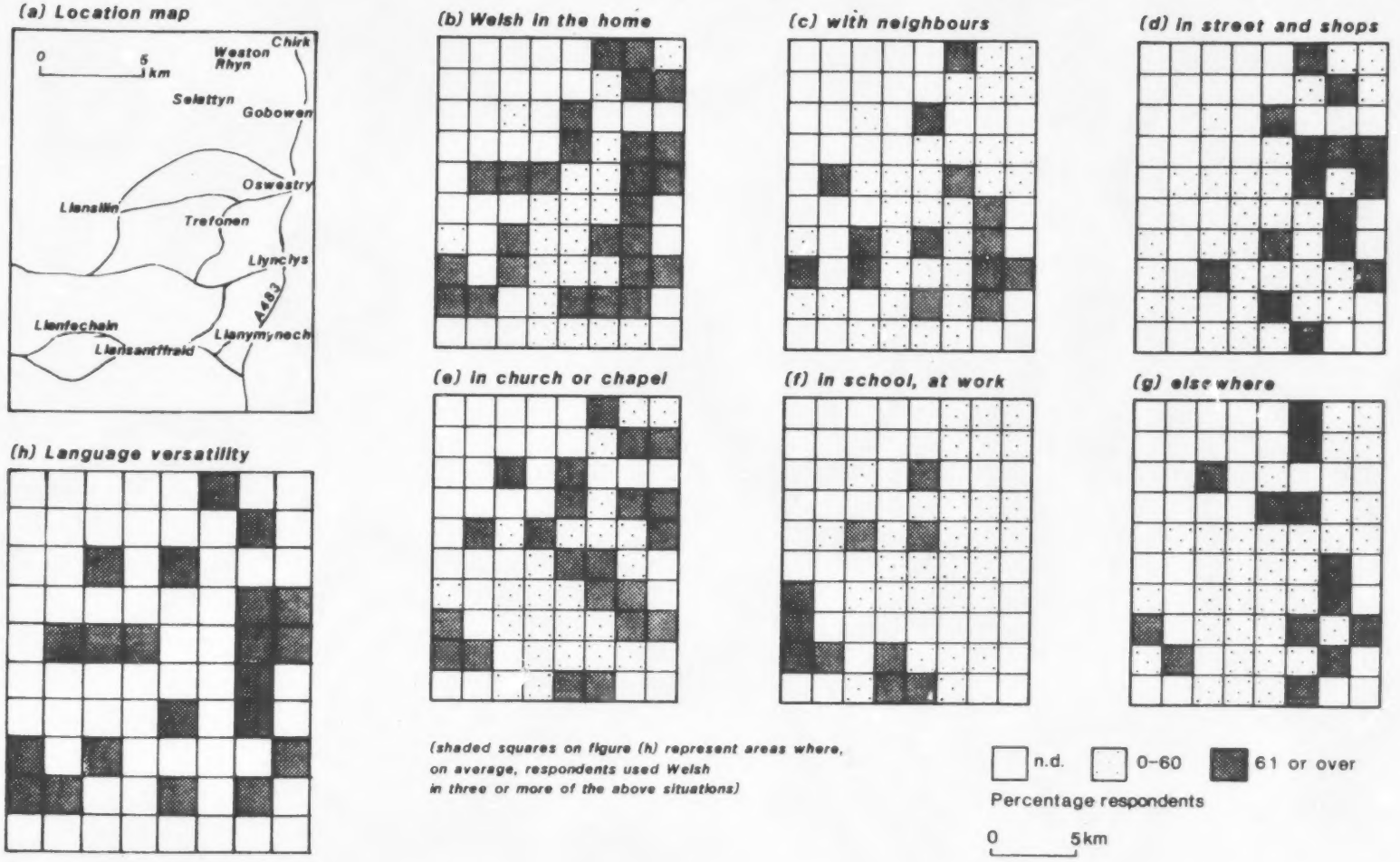


(A detailed explanation of frequency scoring system may be found in Ambrose (1979).)

Figure 10

there is an unexpectedly high frequency of use, apparently spontaneously generated in an area where the language might be assumed to be practically extinct. On the other hand, in a zone running down the centre of Figure 10, containing areas where over eighty per cent of households have a Welsh speaker, the potential for frequent use fails to be turned to account. Casual enquiry amongst speakers in the area elicits comments such as : "it doesn't seem worthwhile using Welsh around here any more". More systematic study of opinion on the strength and weakness of the language in various parts of the area reveals patterns far more complex than those which official statistics might lead the observer to expect. All the evidence points to the part played in the local collapse by group uncertainty and lack of confidence in the future role of the language, corroborating the evidence at the regional and the national scale. A decreased faith in the role which should be allocated to the language seems to lead, in turn, to a decreased willingness - perhaps eventually even a decreased ability - to use it. Using census data, the whole area covered by this map was interpreted as suffering collapse, but the evidence at the local scale indicates a quite distinct set of sub-zonations within it. Under ideal circumstances each sub-area should receive quite a different language planning approach, but realistically, if Welsh ever becomes the subject of coherent planning proposals for language protection and development, it is difficult to imagine their ever reaching that level of sensitivity. As an attempt to produce evidence to corroborate the patterns for language frequency our enquiry took one further tentative step along the road of mapping Welsh use in practice : a series of maps was produced to show home locations of speakers who stated that they used Welsh in each of a series of daily situations (Figure 11). The idea was that if there were areas where, despite large proportions of potential

Versatility of Welsh use



(shaded squares on figure (h) represent areas where, on average, respondents used Welsh in three or more of the above situations)

Figure 11

Welsh speakers, the language was little used in practice, this lesser use might also be represented by a decreased variety of situations in which people would be willing to use it. The evidence in this case is far from conclusive, but it appears that each major activity of daily life produces its own geographical pattern of use. More importantly in this case if, as in the map at bottom left, a general map of the variety or versatility of Welsh use is constructed, a pattern is produced which tends to confirm that of speaking frequency as illustrated in Figure 10. The areas of greater and lesser variety of Welsh use are seen to coincide in few respects with the distribution which might have been predicted using the numeric pattern on Figure 9.

Scale and interpretation; concluding remarks:

It seems a salutary exercise, finally, to place the detailed study area back into the context of the Welsh language area as a whole (Figures 3 and 4), in an attempt to assess where this descent into detail has led. The attempt to draw and re-draw the patterns of language potential and practice at varying scales, producing as it does a series of contradictory patterns, may raise the understandable criticism that the evidence produced by goegraphers on the state of minority language survival can be used in support of whatever case the writer happens to find most convenient. The response is that the various scales should be seen as complementary, rather than alternative, interpretations. There are considerable dangers in relying simply, for our impressions of the state of survival of Welsh, upon one set of data generated once every ten years. Even the evidence on whether Welsh is or is not a minority language in any area has been seen to vary according to the scale at which observation has been made, and in any case the pure fact that the language

is in numeric minority may not be particularly significant, since the evidence has shown that it is not the case that the language is necessarily 'safe' in places where over eighty per cent of people can speak it, nor that it is 'lost' or 'dead' where only ten per cent can do so.

The scale problem has particular implications for language planners in their consideration, for example, of the zone of collapse. As seen on Figure 4, it may seem to suggest itself as the basis of a 'linguistic buffer zone' for the protection of the more strongly Welsh core areas to the west. Examination at increasingly large scales has shown, however, that the zone is not equipped to perform the function effectively; it is an area in flux, where morale is low and where no two localities share exactly the same problems - quite the last place where the 'grand design' for language planning should be attempted, and yet at the same time the place in need of the most urgent and comprehensive measures for the protection of the individual Welsh speakers.

It can be concluded that the more ways we have at our disposal of assessing the position of minority languages such as Welsh, the more complex their position is seen to be and the more realistic our approach to their conservation and development is likely to become. In these days of expensive labour it is certainly not possible to produce detailed language maps for the whole of the language area, and most routine planning considerations in Wales will continue to rely heavily upon information provided by the language census. If, occasionally, these figures can be supplemented by information on the detailed patterns of language use by local speech groups, census data may perhaps be interpreted with new confidence and greater understanding.

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